

REMARKS

Claims 5, 6 and 35-49 are canceled; and claims 1-4 and 7-34 are pending in the application.

Claims 14-34 are indicated to be allowed.

Claims 8-13 are indicated to be unpatentable over Rigg in view of Kirby. Applicant respectfully submits that neither Rigg or Kirby is an appropriate §103 reference. Specifically, both Rigg and Kirby are commonly owned by Micron Technology, Inc. at the time the present invention was made, and the present invention was also owned by Micron Technology, Inc. at such time. The assignment of Rigg and Kirby to Micron Technology, Inc. is evidenced by documents submitted herewith, and the assignment of the present invention to Micron Technology, Inc. is evidenced by an assignment recorded at reel/frame 015204/0879. §103(c) specifically states that subject matter which qualifies as prior art only under §102(e) can not be utilized for a §103 rejection if the subject matter and the claimed invention were owned by the same entity at the time the invention was made. Thus, neither Rigg or Kirby can be utilized in a §103 rejection of the claims of the present application.

Claims 1-7 stand rejected as being anticipated by Rigg. Applicant respectfully requests reconsideration of such rejections.

Referring initially to claim 1, from which the other claims depend, such recites a method in which an opening is formed through a layer and to a surface suitable for electroless plating, with a periphery of the opening including an electrically conductive portion of an electrically conductive node. The claim then recites that a conductive material

is electroless plated within the opening and from the suitable surface, with the electroless-plated material forming an electrical contact to the electrically conductive node. The subject matter of claim 1 can be understood with reference to, for example, Figs. 7 and 8 of the present application. Fig. 7 shows an opening 122 formed through a layer 56 and to a surface 105 suitable for electroless plating, with the opening including electrically conductive portion of an electrically conductive node 62. Fig. 8 shows conductive material 80 electroless plated within the opening.

Rigg does not show any application in which an opening is formed through a layer and to a surface suitable for electroless plating. Rather, Rigg shows at, for example, Figs. 3E and 3F a material 371 having a surface suitable for electroless plating formed within an opening, and a material 372 electroless plated onto material 371. In other words, instead of showing the claim 1 recited step of forming an opening to a surface suitable for electroless plating, Rigg performs the opposite sequence of a first forming the opening and then providing the surface suitable for electroless plating within the opening. Rigg thus does not anticipate the subject matter of claim 1. Further, for reasons discussed above, Rigg cannot be utilized as a §103 reference against the subject matter of claim 1, and thus also does not render obvious the subject matter of claim 1. Claim 1 is therefore allowable over Rigg.

Claims 2-4 and a 7-13 depend from claim 1, and are therefore allowable for at least the reasons for which claim 1 is allowable, as well as for their own recited features which are neither shown or suggested by the cited references.

Claims 14-34 are allowed, and claims 1-4 and 7-13 are allowable for the reasons discussed above. Applicant therefore respectfully requests that the Examiner's next action be a Notice of Allowance formally allowing all of the pending claims.

Respectfully submitted,

Dated: OCTOBER 29, 2005

By: 

David G. Latwesen, Ph.D.
Reg. No. 38,533

Encls. Documents evidencing the assignment of the subject matter of Rigg and Kirby to Micron Technology, Inc.



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Patent Assignment Details

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Page

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Total properties: 1

1 Patent #: 6943106 Issue Dt: 09/13/2005 Application #: 10784074 Filing Dt: 02/20/2005
Publication #: US20050186790 Pub Dt: 08/25/2005

Title: METHODS OF FABRICATING INTERCONNECTS FOR SEMICONDUCTOR COMPONENTS
INCLUDING PLATING SOLDER-WETTING MATERIAL AND SOLDER FILLING

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Exec Dt: 02/02/2004

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NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

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DOC DATE: 10/29/2003

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DOC DATE: 10/29/2003

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014710/0875 PAGE 2

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SERIAL NUMBER: 10713878

FILING DATE: 11/13/2003

PATENT NUMBER:


ISSUE DATE:

TITLE: MICROELECTRONIC DEVICES, METHODS FOR FORMING VIAS IN
MICROELECTRONIC DEVICES, AND METHODS FOR PACKAGING MICROELECTRONIC
DEVICES

THERESA FREDERICK, EXAMINER
ASSIGNMENT DIVISION
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Express Mail No. EL491508935US

Attorney Docket No. 108298742US
Disclosure No. 03-0599

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11-13-03		102607044			
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1. Sidney B. Rigg 2. Charles M. Watkins 3. Kyle K. Kirby			4. Peter A. Benson 5. Salman Akram Micron Technology, Inc. 8000 South Federal Way P.O. Box 6 Boise, Idaho 83706-9632		
Add'l names of conveying parties attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
3. Nature of conveyance:					
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4. Application number(s) and/or patent number(s):					
If this document is being filed with a new application, the date of signature by the first named inventor was: October 29, 2003.					
A. Patent Application No.(s) 10713878 B. Patent No.(s)					
Additional numbers attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
5. Name and address of party to whom correspondence concerning document should be mailed:			6. Total No. of applications and patents involved: one (1)		
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Application No. _____
Express Mail No. EL491508935US

Attorney Docket No. 108298742US
Disclosure No. 03-0599

ASSIGNMENT

THIS ASSIGNMENT is by Sidney B. Rigg, Charles M. Watkins, Kyle K. Kirby, Peter A. Benson, and Salman Akram (the "Assignors"), residing at 2477 N. Leann Way, Meridian, Idaho 83642; 1313 W. Meander Drive, Eagle, Idaho 83616; 10681 N. Sagecrest Place, Boise, Idaho 83703; 2188 White Pine Place, Boise, Idaho 83706, and 1463 E. Regatta Street, Boise, Idaho 83706, respectively. We Assignors have invented one or more certain inventions (the "Invention(s)") described in a United States Patent Application entitled "MICROELECTRONIC DEVICES, METHODS FOR FORMING VIAS IN MICROELECTRONIC DEVICES, AND METHODS FOR PACKAGING MICROELECTRONIC DEVICES" (the "Application") and ☒ executed concurrently herewith; or ☐ filed on _____ as Application No. _____. We Assignors authorize the Assignee, identified below, or its representatives to insert the application number of the Application when known.


Micron Technology, Inc., a corporation of the State of Delaware having a place of business at 8000 South Federal Way, P.O. Box 6, Boise, Idaho 83706-9632 ("Assignee"), desires to acquire the entire right, title and interest in and to the Invention(s) and the Application, and in and to any patents (collectively, "Patents") that may be granted for the Invention(s) in the United States or in any foreign countries.

For valuable consideration, the receipt and sufficiency of which we acknowledge, Assignors hereby sell, assign, and transfer to Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to: the Invention(s), the Application, and any Patents; any divisions, continuations, and continuations-in-part of the Application and any other application claiming priority rights from the Application; any reissues, reexaminations, or extensions of any and all Patents; the right to file foreign applications directly in the name of Assignee; and the right to claim priority rights deriving from the Application (collectively, the "Rights"). Assignors warrant that they are joint owners of the Rights, and that the Rights are unencumbered. Assignors also agree to not sign any writing or do any act conflicting with this assignment, and, without further compensation, sign all documents and do such additional acts as Assignee deems necessary or desirable to: perfect Assignee's enjoyment of the Rights; prepare and prosecute the Application or any other applications for Patents; conduct proceedings regarding the Rights, including any litigation or interference proceedings; or

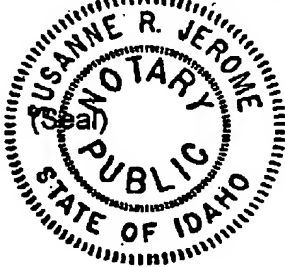
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Disclosure No. 03-0599

perfect or defend title to the Rights. Assignors request the Commissioner of Patents to issue any Patent of the United States that may be issued on the Invention(s) to Assignee. This Assignment may be executed in counterparts.

Date: 10/29/03
Sidney B. RiggSTATE OF IDAHO
COUNTY OF ADA

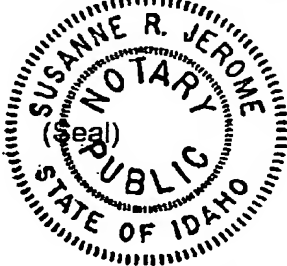
On October 29, 2003 before me, Susanne R. Jerome, personally appeared Sidney B. Rigg, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.



WITNESS my hand and official seal.


SignatureDate: 10/29/03
Charles M. WatkinsSTATE OF IDAHO
COUNTY OF ADA

On October 29, 2003 before me, Susanne R. Jerome, personally appeared Charles M. Watkins, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.



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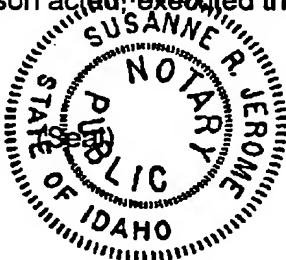

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On October 29, 2003 before me, Susanne R. Jerome, personally appeared Kyle K. Kirby, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

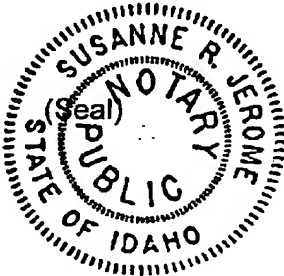


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Susanne R. Jerome
Signature

Date: 10/29/2003Peter A. Benson
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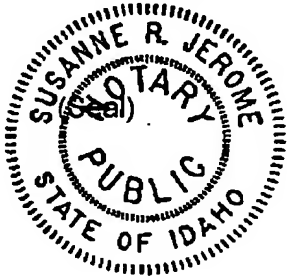
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Application No. _____

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WITNESS my hand and official seal.

Susanne R. Jerome
Signature
